A Canadian-based online English educational company promoting equity of education in rural China

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ABSTRACT. In 2001, Ministry of Education of China announced that English would be a compulsory subject in public school in China; however, local education departments and individual schools have the flexibility to decide what grade to start English lessons. During the last decade, the disparities in English learning between rural and urban schools has generated a lot of attention due to the unbalanced economic development between coastal and inland regions. This paper examines one longitudinal case study of 36 grade one students from the rural area Yichun in Jiangxi, one of the poorest provinces in China, learning English online with qualified English as a Second Language (ESL) teachers from Canada through a Canadian based EdTech Yorke Communicative Education Ltd. (YorkeOnline) Key findings indicate that online learning could not only help students in rural areas improve their English language abilities, but also instil greater confidence and positive attitudes towards studying English. The findings also suggest that applying the same method to other rural regions could help promote equity of education in English language study in China.

KEYWORDS: equity of education, rural China, online English

1. Introduction

1.1 Background information

With China's deepening socioeconomic reform since 1978, English has solidified its importance in China. Proficiency in English has been widely regarded as a national as well as a personal asset (Cortazzi & Jin, 1996; Adamson, 2001; Jin and Cortazzi, 2003). On the national level, English is perceived by the government as a necessary means to help the nation open up further; a valuable resource for realizing its modernization program; and an important cornerstone of international competition (Cortazzi and Jin, 1996a; Maley, 1995; Ross, 1992; J. Z. Zhang, 1993). On a personal level, proficiency in English is seen as a key to a host of opportunities: to be able to enter and graduate from university; to go abroad for

further education; to secure desirable jobs in public and private sectors, foreign-invested companies or joint ventures; and to be eligible for promotion to higher professional ranks (Ng and Tang, 1997).

On the other hand, Chinese parents traditionally value education highly (Sun & Rao, 2017) and see it as a means of upward social mobility. Proficiency in English performs not only as vital role in standardized exams such as GaoKao (the College Entrance Examinations), but as also being a door to a whole host of opportunities, including going abroad for further education, finding desirable jobs, and gaining promotions (Hu, 2010). Indeed, these beliefs seem to be grounded in reality, as higher scores on the College English Test (CET) are also linked with significantly higher salaries post-graduation (Li et al., 2012). Therefore, there has been a tendency to introduce English at an earlier age into school curriculum in China (Kirkpatrick, 2011) as well as gaining more exposure.

1.2 Education Policy in China

On January 18, 2001, Ministry of Education of China issued a document entitled

The Ministry of Education Guidelines for Vigorously Promoting the Teaching of English in Primary Schools, stated that:

"The basic goal of promoting the opening of English courses in primary schools is: beginning in the fall of 2001, primary schools in cities and counties across the country will gradually offer English courses; in the fall of 2002, local primary schools in towns and villages will gradually offer English courses. The starting grade of English courses in primary schools is generally the third grade. The education administrative departments of all provinces, autonomous regions, and municipalities directly under the Central Government can determine the work goals and steps for the provision of English courses in primary schools in their respective regions based on actual conditions..."

It mandating that students start to learn English as a compulsory subject in the third grade. Furthermore, local education departments and individual schools have flexibility to decide when to include English lessons (Ministry of Education, 2001).

1.3 Current disparities between rural and urban area

As a result of the decentralization of educational administration, provincial or municipal governments and their bureaus of education have assumed greater power and responsibility for the administration of local primary, secondary and tertiary education (Cheng, 2000; State Council, 2001; Yin, 1993). Cortazzi and Jin comment in 1996 that "there are significant differences in language teaching developments between the major cities and small cities, between rural towns and countryside, between coastal and in-land areas, between north and south, between key and non-key schools or universities". These inequities carry over to the education system where researchers have documented differences not only in resource allocation but

also in the academic performance of students in urban and rural schools (Hallinger, Liu & Shangnan, 2016). It has also been corroborated that a growing "achievement gap" has been documented in the performance of students between urban and rural backgrounds (Liu, 2009; Othman and Muijs, 2013; Wu and Zhang 2010; Zhao et al., 2012; Zhang and Pang, 2016). Based on a research from more recently, gaps in school performance between China's urban and rural children emerge as early as primary school (Zhang, Li, and Xue, 2015) and have been shown to exist not only in the national aggregate but also at the provincial level (Xiang et al., 2019). For instance, while Shanghai students have performed among the top in the world on standardized tests, students from lower-income, inland, and rural provinces have performed among the lowest (Gao et al., 2017).

1.4 Reasons for disparities

1.4.1 English courses offered at different grades

According to the National Curriculum, English, as one of the three core subjects, starts from Primary Three; however, local education departments and individual schools have the flexibility to decide when to start English lessons. Many schools in metropolitan areas introduce English earlier, from Primary One, whilst for those in remote and rural areas, the introduction of English may be delayed due to inadequate teaching resources. (Qi, 2016).

Jiangxi is one of China's poorest provinces, located in the middle south. While coastal and eastern parts of China have experienced huge economic growth over the last decade, the middle provinces have lagged behind, leaving wide economic and social gaps between them. The rural-urban divide has widened too.

According to the report from Ministry of Education of China. There were only 35% of primary schools in Jiangxi had English class from primary three in 2005, even though it had become compulsory subject in primary three since 2001. Moreover, in a more recent document from Jiangxi Education Online, In 2017, Jiangxi Province Comprehensively Improved Compulsory Education Weak Schools in Poverty-stricken Areas, Special Supervision and Guidance Report indicated that there is a huge shortage in English teachers in rural Jiangxi. Currently, there is less than five private schools in Yichun offers English class before grade three. The whole public schools provide English class only from grade three.

1.4.2. Lack of qualified teachers

Though indicators of teacher quality are contentious and the methodological problems in comparing their significance considerable (Vignoles et al., 2000) there is broad consensus that it is the single most important school variable influencing student achievement (Darling-Hammond, 2000; Rivkin, Hanushek, and Kain, 2005; UNESCO, 2006). The close relationship between teacher quality and student outcomes has been demonstrated in numerous studies in international literature

(Boyd et al., 2008; Kane, Rockoff, and Staiger, 2007; Sanders and Rivers, 1996; Goe, 2007; Rice, 2003; Rockoff, 2004). One study in the United States estimated that higher student grades improve three times more when taught by a high-quality teacher versus a low-quality teacher (Hanushek, 2011). The McKinsey report on world class education systems also singled out the professional learning of teachers in Shanghai schools as an important factor in explaining the school system's success (see OECD, 2005, 2014; Paine, 2013).

Although the proportions of teachers with professional qualifications have increased greatly over the years, the quality of the teaching force is still rather low and cannot adequately meet the demands of English Language Teaching (ELT) reforms initiated in recent years (Yu, 2001; Nunan, 2003).

Rural schools in China—as in other parts of the world—have difficulty attracting high-quality teachers for a variety of reasons, such as lower salaries that are often paid late, remote living environments, relatively poor infrastructure, fewer promotion opportunities, and heavier workloads (Liu and Onwuegbuzie, 2012).

According to the analysis of 2016 data from the Educational Statistics Yearbook of China, published by the Ministry of Education of China, suggests equity of teacher quality, based on the proportion of full-time teachers with advanced degrees, is less available in rural areas. Rural students are 11% less likely to have access to a teacher with an advanced degree when considering the number of students enrolled in each level of education.

Specifically, as the data *Academic Qualifications and Professional Titles of Full-time Primary School Teachers* by City on Jiangxi Provincial Department of Education showed in 2020, there are only 36 primary school teachers holding master degrees while nearly 60% of teachers hold college diplomas in Yichun.

This has also meant that novice teachers with little training and experience are sometimes recruited. For example, some of those teaching College English generally have only an undergraduate degree in English language and literature and many have not had any formal teacher training (Zhu, 2003).

1.4.3. The difficulty of migrating to urban areas

In the tradition of Chinese education, parents play a dominant role in the process of their children's schooling (Hu, 2008). Chinese parents generally want to invest in their children's education, not surprisingly as Confucian philosophy priorities education in society (Wei, 2011).

One of the most straightforward ways for parents in rural area to provide a better education for their children seems to migrate to an urban area. However, rural families in China face administrative restrictions in the form of the household registration, or hukou system. Under the hukou system, a person's access to social services—including public education—is tied to their hukou registration (which is inherited at birth). As a result, those children with rural hukous have historically

been unable to legally enrol in urban primary schools (Chan and Buckingham, 2008).

All these factors triggered the disparities in education equity have exacerbated the urban-rural education gap.

2. Theoretical framework

2.1 Equity in Education

Education equity is one of this century's most significant problems (UNESCO, 1990, 2000, 2015a). It refers to fairness and justice in educational opportunity (Gillborn and Deborah, 1990). Much research has shown that inadequate educational opportunities have both negative individual and societal consequences (Buchmann and Hannum, 2001; Campos, Ren, and Petrick, 2016).

2.2 Critical period hypothesis

Penfield and Roberts put forward the "Critical Period Hypothesis" of language learning in 1959. According to this hypothesis, the Broca's Area in left hemisphere develops rapidly between 2 and 4 years old. Language learned during this period is stored in the Broca's Area and can be used flexibly. The latest scientific research shows that the best age for children to learn a foreign language is when they are nine or ten months old. Therefore, English exposure for preschool children should be started as early as possible.

This paper's intent is to find out whether online English teaching will ensure students' language ability development and help promoting equity in language studying in rural China.

3. Methodology

3.1 Research design

This study utilized participatory action research in its methodology, specifically, a two-year (Sept. 2018 to Oct. 2020) study participating and observing online English teaching studying students at Yorke Communicative Education Ltd. (YorkeOnline). A Canadian online education company that provides ESL courses to students in mainland China with qualified ESL teachers from Canada, student's performance progress are recorded by placement test scores. A qualitative and quantitative analysis strategy was also adopted in the study through interviews with students and their parents.

3.2 Participants

Participants were chosen from students studying at YorkeOnline. In this study, 36 grade one students from same region, Yichun, one of the rural area in Jiangxi province, was chosen. Although they studied in different public schools in Yichun, they share similar backgrounds in that they started their first English lesson with YorkeOnline since their school didn't start English classes until grade three. Their parents realized the importance of English learning but were not able to teach their kids by themselves, thus, they signed up courses with YorkeOnline. Their parents were informed and asked permission in advance of the study. Their data would be strictly kept confidential; they had the right to know how their data would be reported prior to publication and refuse the use of the data when they were consulted.

3.3 Data collection

The course plan with YorkeOnline is as listed on table 1. The participants started their course in Sep 2018, which is also the time they entered grade one in their public school. 36 participants signed up for different class type with one on one, as well as small groups of three or six students. They attend live classes through live stream technology on same frequency, weekly, usually on the weekend except for holidays. Each class is at the same length of two hours with a 10 minutes break during the class. After class, they are required to do homework including audio recording which is sent to the study group on Wechat everyday. The teaching assistant will check and revise the homework for students. As well, all the participants received same class delivered by the total of four teachers from YorkeOnline with two Chinese teachers and two Caucasian teachers. Each group received classes from a Chinese teacher and a Caucasian teacher equally. The learning material used was developed by YorkeOnline based on the English curriculum in China including ESL materials from Canada. Their study with YorkeOnline is ongoing but the observation of this study was completed on Oct 2020. They all entered grade three this year and will start having English classes in their school.

Table 1. Study plan with YorkeOnline

Numbers of Students	Class size	Class length	Class frequency	Start date	End date
6	1 on 1	2 hours	Once a week	2018-09-10	2020-10-10
12	1 on 3	2 hours	Once a week	2018-09-10	2020-10-10
18	1 on 6	2 hours	Once a week	2018-09-10	2020-10-10

Students performance was evaluated mainly by the placement test score. The placement test was designed by YorkeOnline but the level is equivalent to the Cambridge English Placement Test for young learners. The level explanation will attached in findings. Participants doing the test once a year during summer holiday (July - August).

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Besides the test score, participants also received interviews regarding their learning experience and attitudes towards English at the end of the study period. These interviews were conducted online through video chat such as zoom or voice chat through Wechat. Sample questions used in interview include:

- 1) How do you feel about your English learning in the past two years?
- 2) How useful do you think English is in the future?
- 3) Do you think you can communicate with a foreigner in English?
- 4) How do you feel about the English class in school since you are in grade three now?

Their parents were also interviewed on their children's learning experiences and how they evaluated their decision to learn English online. Sample questions used in the interview include:

- 1) Does your kids' learning outcome meet your expectations?
- 2) What do you think of the learning experiences in the past two years?
- 3) Will you choose to keep learning English online in the future?

These questions were open, and would not restrain participants' free will. It should be noted that specific questions vary to certain extent from the general ones as I tried to contextualize these general questions in each interview. All the participants joined the interview and results were recorded for further analysis.

3.4 Data analysis

Three rounds data analysis were administrated. In the first round, all 36 students' score on the placement test were collected and catorgoriewd into corresponding level as table 2 presented. In this round, we want to have a basic understanding of student's English ability and able to test whether solely online learning will achieve same learning outcomes with students learning in school. In the second round, notes on students' interview were managed and carefully reviewed. This is aiming to get understanding of participants learning experience and their attitudes toward English and online leaning. In the last round, notes of parent's interviews were recorded. This round of analysis led to the recognition of the extent that online learning solves the problems they previously had and how students' learning outcome meet their expectations.

4. Findings and discussion

4.1 Placement test score

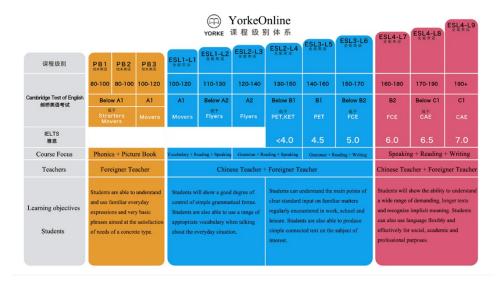
The results of placement test are shown on table 2. Level descriptions are shown on table 3. Despite there are few students presented disparity in the performance, the results are meeting expectation.

Majority of students reached A1 Mover level after completing one year studying; 7 students perform advanced and reached Flyer level. On the second placement test, results seemly vary, but its within regular range based on individual student's learning ability.

Table 2. Participant's placement test score

	A1 Movers	Below A2 Flyers	A2 Flyers	Below B1 PET/KET	B1 PET
First placement test	29	7			
Second placement test		4	18	12	2

Table 3. level explanation of placement from YorkeOnline.



4.2 Interview of students

Based on the interview results, 95% of students have positive attitudes toward English;

80% of students are confident in communicating with foreigners in English. Noteworthily, 100% of students believe they can have a good performance in school.

Some of the answers of interviews were recorded in the following way:

"I think English is very interesting, especially when I met a foreigner at the mall one day, I came to say hi and I got to know that he is from UK. My parents were so proud of me because of this."

"I think learning English is not very hard. I am having English class in school now and I realized its actually very easy for me, because I already know those things. I always raise hands and answer questions in class and my classmates are all admire me because of this."

"I think learning in another country is super cool, I hope one day I can study abroad in Canada."

However, in terms of the question "How useful do you think English is in the future?" Several students responded that:

"I am not sure how useful it will be. I am learning it solely because my parents want me to and I have to listen to them".

4.3 Interview with parents

Interviews with parents are actually over expected that over 95% of parents believe that they've made correct decision in learning English in advance of school system. As one mom noted:

"I learned English at middle school myself, and I understand the importance of learning English in an early age. I hope my daughter can do better than me and I am willing to provide the opportunities to her. I hope she can work in a foreign company in Beijing or ShenZhen when she grow up."

Over 80% of parents believe that they are more confidence in the competition their children will face in the future with students from other provinces.

One parent from the interview told us that her cousin migrant to Shenzhen three years ago for a better work opportunity and education for their kids, she was not able to migrant and stated that:

"My cousin lives in Shenzhen and my nephew had English class since kindergarten; public schools in Shenzhen provide English class since grade one as well. I was worry about my daughter because they will end up join the same college entrance examination; it's not fair for my daughter. But I am not able to migrant because the huge economic pressure of life in Shenzhen. It seems to be the best way that my child can learn English online with teachers in the western country."

There are also several parents had the thoughts about sending their children into international school or study abroad in the future.

"I think my kid really enjoy learning in English and the way that foreigner teacher teaches. I think it's possible that he can study in an international school or study abroad when he grow up."

4.4 Discussion

There has been abundant reviews on the equity of education in China. However, the case study on these topics is inadequate and outdated. This study provides a distinct case of implementing online education in rural China over a two year period of observation. The results are actually beyond expectation that live online learning can not only provide accessible teaching resources to students in rural area and improve their English language ability, but also develop a positive attitude of students toward English learning. Furthermore, it's an efficient and affordable way for parents in rural area comparing to moving the whole family to an urban area.

It is possible that in poorly-resourced schools the teaching and academic performance are low to such a degree that EdTech could make a significant difference in outcomes. Many studies in the international literature have raised the possibility of EdTech's potential in this regard (Hannum et al., 2009; Sattar, 2007; Sundeen and Sunden, 2017; Barker and Hall, 1994; Sharma, 2003).

Also the study agrees the statement that at times, the "Tech" in EdTech may have relatively small effects on academic outcomes (Ma, 2020) Though the sample is small, these rural schools and situation share many characteristics with rural schools throughout China.

The use of online teaching methodology has the potential to distribute opportunities for learning more widely and equitably across the teaching force. It can also improve the quality and variety of the resources and support available to students, opening up new avenues to professional development. (Bernadette, 2008)

5. Conclusion

In conclusion, this paper examined whether online learning can make up the achievement gap in English language learning between students from rural and urban areas. The findings show that 1) by increasing the accessibility of learning resources and ESL teaching, online learning can not only increase rural area students' English language ability, but also helps them develop a positive attitude towards English learning. 2) currently, online learning is one of the most affordable ways for parents in rural area to provide better English language learning and resources to their children when compared to the costs of migrating to an urban area. The findings suggests that the achievement gap between rural and urban students in English language learning could be effectively eliminated by applying the same method to other rural region in China and promoting equity in education in China.

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